

Appl. No. 09/811,360  
Amendment dated October 6, 2005  
Reply to Office Action mailed May 12, 2005

Attorney Docket No. 355004-991501

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preparing a stemless humeral head fixation having a humeral head including a base surface configured for cement or ingrowth fixation, or both, and a non stem-bearing, stabilizing, non-intramedullary base extension including multiple fins for rotational stabilization of the humeral head fixation on a cut humeral surface configured for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head fixation thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head fixation to the humeral surface including cement or ingrowth fixation, or both, of the humeral head with the humeral surface, thereby recreating the anatomic proximal humeral configuration, wherein the base surface of the humeral head contacts or substantially mates with the cut humeral surface when coupled therewith and the non-intramedullary base extension is impacted into the cancellous region, and

wherein the multiple fins are formed to have a cruciform shape and are uniformly planar along their entire extents and directly intersect at a center of the base surface, said center having a diameter that is approximately equal to a thickness of each of said fins, such that each said multiple planar fin protrudes radially along a plane from the center of the base surface where it intersects with each of the other fins.

Claim 51 (Previously presented): The method of any of Claims 25, 31 or 42-43 wherein said step of preparing a humeral surface comprises the steps of:

surgically establishing an access to a humerus of a patient;  
coupling a guide to the humerus, wherein the humeral head remains exposed;  
positioning said guide to define a humeral surface; and

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removing said humeral head by cutting along said humeral surface defined by said guide, whereby a precise humeral surface is revealed for attaching an artificial humeral head fixation during said arthroplasty.

Claim 52 (Previously presented): The method of Claim 51, further comprising the step of aligning said humeral surface with a glenoid version guide.

Claim 53 (Cancelled)

Claim 54 (Previously presented): A method for performing a shoulder arthroplasty, comprising the steps of:

- surgically establishing an access to a humerus of a patient;
- coupling a guide to the humerus, wherein the humeral head remains exposed;
- positioning said guide to define a humeral surface;
- removing said humeral head by cutting along said humeral surface defined by said guide, whereby a precise humeral surface is revealed for attaching an artificial humeral head fixation during said arthroplasty;
- preparing for coupling to the cut humeral surface a stemless humeral head fixation having a humeral head including a base surface and a non stem-bearing, stabilizing, non-intramedullary base extension including multiple fins protruding therefrom for rotational stabilization of the humeral head fixation on a cut humeral surface; and
- coupling the humeral head fixation to the humeral surface, thereby recreating the anatomic proximal humeral configuration, wherein the base surface of the humeral head contacts or substantially mates with the cut humeral surface when coupled therewith and the non-intramedullary base extension is impacted into the cancellous region, and

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wherein the multiple fins are formed to have a cruciform shape and are uniformly planar along their entire extents and directly intersect at a center of the base surface, said center having a diameter that is approximately equal to a thickness of each of said fins, such that each said multiple planar fin protrudes radially along a plane from the center of the base surface where it intersects with each of the other fins.

Claim 55 (Previously presented): The method of Claim 54, further comprising the step of aligning said humeral surface with a glenoid version guide.

Claims 56 – 69 (cancelled)